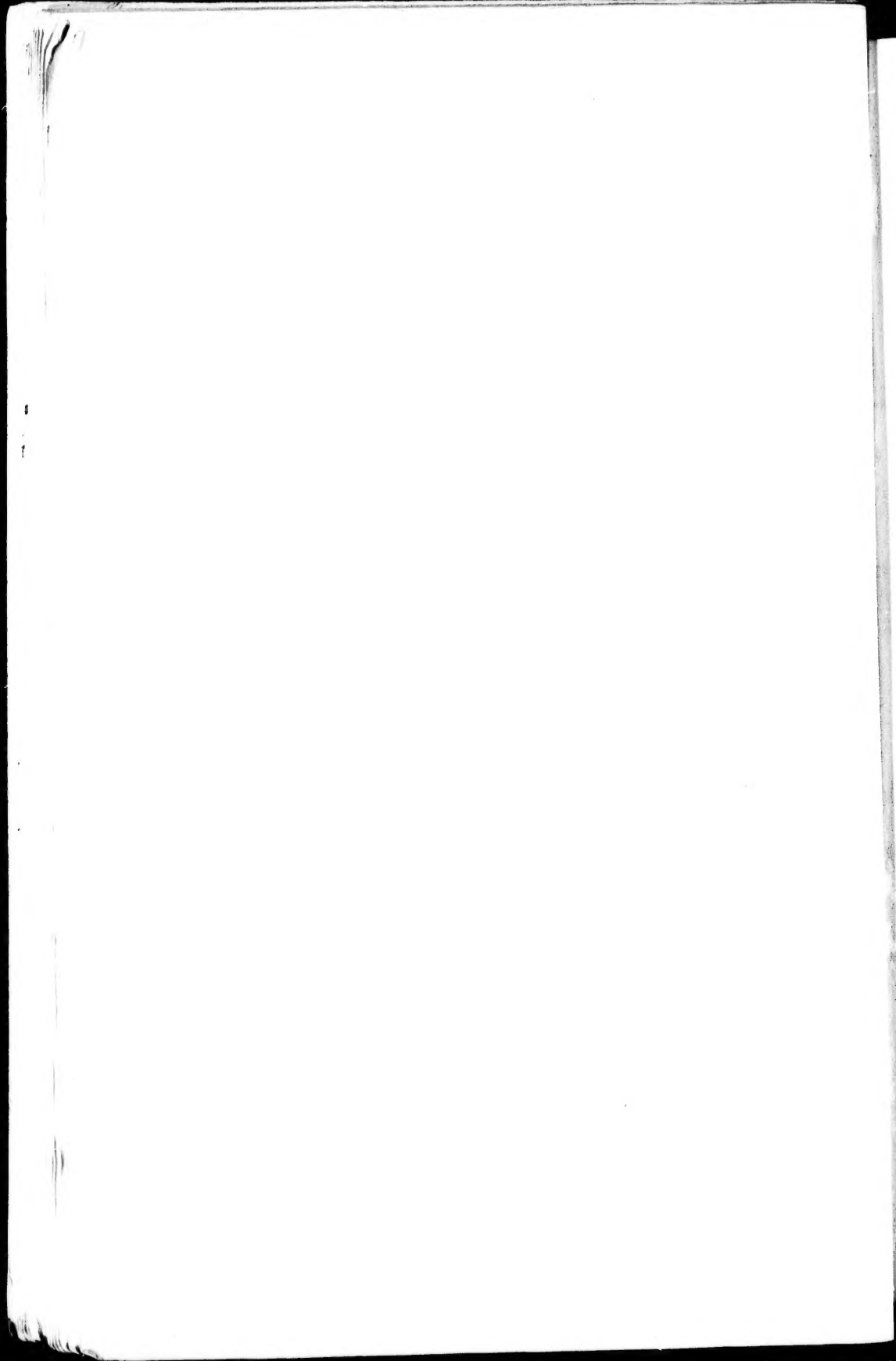




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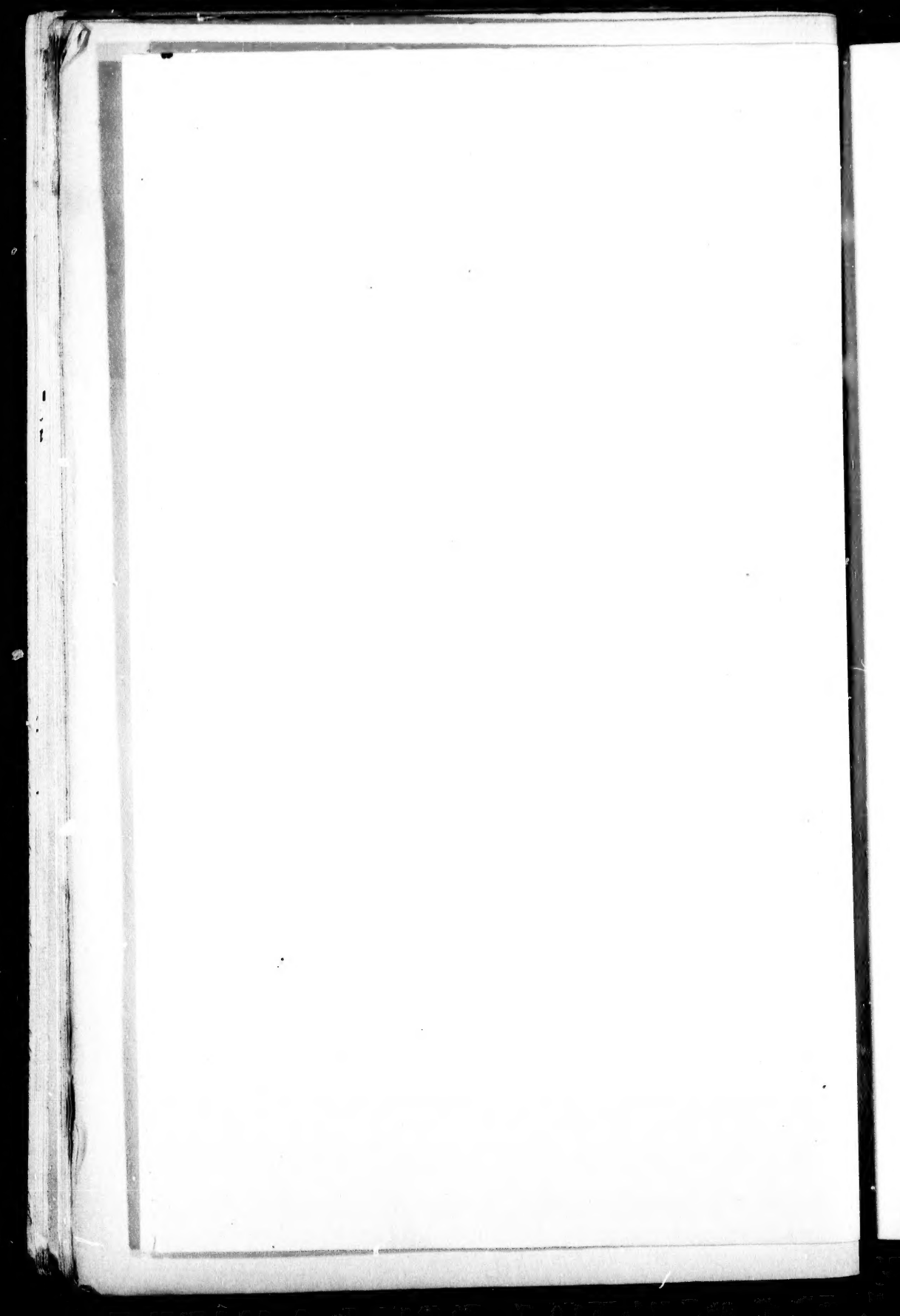
AN ANSWER.

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JAMES WICKERSHAM,
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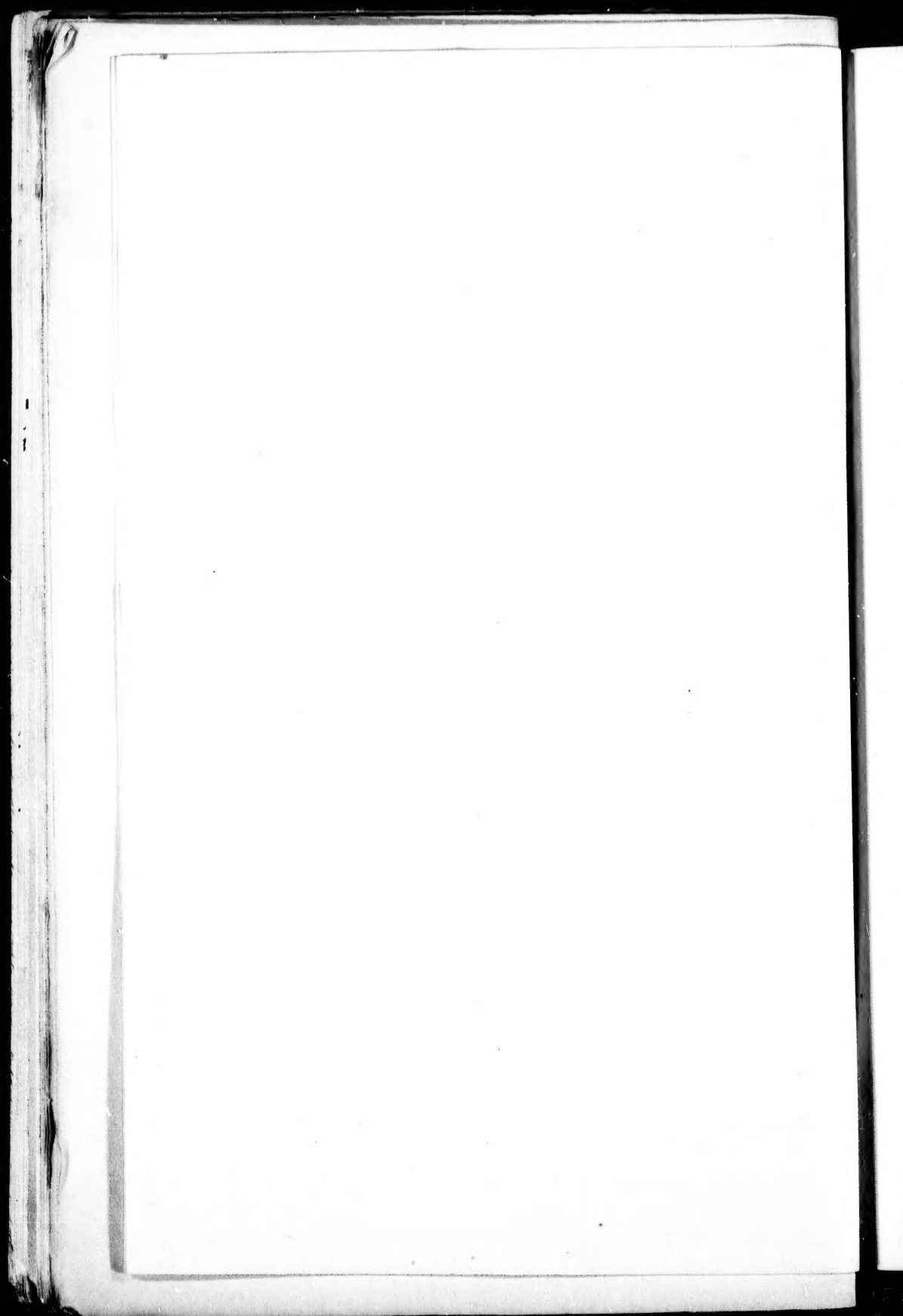
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Whence Came the American Indians?

An Answer.

In the February *Forum*, Major J. W. Powell, Director of the Bureau of Ethnology, under the first above title, presents a profoundly interesting statement of the conclusions drawn by him from an examination of the entire field of American Ethnology. Within this domain his opinion is entitled to very respectful consideration and may generally be accepted as conclusive; in this instance, however, there is such a divergence of thought amongst Americanists that this important and final decision ought not to pass without public dissent. Humboldt the philosopher, Prescott the historian of Mexico and Peru, and Gallatin and Henry the founders of the science of American Ethnology, after many years of careful investigation reached conclusions directly opposed to those now announced by Major Powell. Many well known Ethnologists of the present day—Putnam, Thomas, Mason and Wilson—find much in the civilization of America to convince them that there exists a bond of relationship therein with Asia, and the earlier conclusions of Humboldt, Prescott, Gallatin and Henry are concurred in and supported by an ever-widening circle of students; there ought, then, to be no effort to conclude the case upon the opening argument.

“What, then, does the science of Ethnology teach of the origin or derivation of the American Indian?” is the inquiry propounded by Major Powell, and his answer is found in this language: “We are therefore abundantly warranted in saying that the American Indian did not derive his forms of government, his industrial and decorative arts, his languages, or his mythical opinions from the Old World, but developed them in the New. Man thus seems to have inhabited the New World

through all the lost centuries of prehistoric time. In fact, we are compelled to believe that man occupied the entire habitable globe anterior to the development of arts, industries, institutions, languages and cosmological opinions. That this aboriginal man was spread abroad from some primitive habitat may be true; but there is no evidence that the dispersion of mankind was subsequent to the development of distinctly human activities as represented by arts, industries, governments, languages and philosophies, although he had already acquired a supremacy over the lower animals which made him the universal species." (1)

Briefly stated, his opinion is that while there may be a unity of species in the ancient physical man, the civilization of America was certainly indigenous; that while the blood of America and Asia may have once commingled in that of a common ancestor, the arts, industries, institutions, languages and opinions of the American tribes were autochthonous and owed nothing to Old World influences.

In answer it is admitted that there is a unity of blood between the two of the Old and New Worlds, and, to define the issue sharply, it is affirmatively alleged that the American Indians are thus connected in blood with the Mongolian stock of East Asia and none other; that the arts, industries, institutions, languages and opinions of the American tribes were also derived from that quarter, and that, too, in comparatively recent times.

The question, then, being at issue, in what forum shall it be tried and by what rule shall it be determined? Where and how can it be demonstrated that the civilization of Mexico and Central America was or was not an importation from Eastern Asia? Clearly in the forum and by the logic and rules of Comparative Ethnology.

Comparative grammar taught Sir William Jones, Schlegel and Bopp that certain great languages of Europe and India were descended from a common stock, and by a comparison of vocabulary and principle the relationship of the Aryan tongues of the Old World was conclusively established. It is by a similar com-

(1) *The Forum*, February, 1898, p. 688.

parison of basic principles and details that the relationship between the tribes of Asia and America can be proven if it really exists.

The technical rules by which the inquiry is to be guided have been stated with sufficient clearness by Major Powell in his third annual report as Director of the Bureau of Ethnology.

Briefly they are, not in order, but in his language, as follows: 1. "When many similarities among two or more peoples are discovered in institutions, languages, and mythic opinions, the presumption is that they all have a common origin in some ancient stock from whom the savage tribes have been derived." 2. "Seeking for further confirmation of this, if it was found that the two peoples spoke the same language, or allied languages, this hypothesis would be strengthened; if it was found that they had other arts in common, that their institutions were alike in many respects, and that their mythologies were substantially the same, the view that the two tribes belonged to the same stock would be accepted." (2)

It is illogical and unreasonable from slight resemblances between the aboriginal arts of Brazil and Syria, for example, to attempt to draw satisfactory conclusions touching the common origin of these tribes; the nations to be compared must be in geographical juxtaposition; there must be probable routes of migration between them, and satisfactory evidence of an actual movement. These conditions are met in the near proximity of Asia and America at Berings Strait, and the existence of the great ocean current of the North Pacific,—the *Kuro shiwo*, or "black stream" of the Japanese. Berings Strait is but 40 miles wide; from time immemorial man has crossed and recrossed it in trade, travel and war. Berings Sea is one of the accepted food stations in the march of mankind from Asia to America (3) When the Russians first reached East Cape they found natives of America held as slaves on the Asiatic shores, and received from the Kamtschatkans such an accurate description of the peninsula of Lower

(2) 3rd Ann. Rep. Bureau of Ethnology, pp. 65-74. Powell.

(3) Migration and the Food Quest. Smithsonian Rep., 1894, p. 523. Mason.

Alaska that the Royal Academy of Science of St. Petersburg prepared the very satisfactory map in Muller's "Voyages," 1761, from their accounts.⁽⁴⁾ Coxe, Whymper, Dall and other authorities give abundant evidence of aboriginal trade and travel from the Anadyr to the Yukon and return. Gradually this northern Mongolian stock straggled through into America, and established fishing camps southward along the sea coast and eastward on the Yukon; traveling along these lines of approach and food supply this stock furnished the populating element to the continent,—the Athapascans of the Yukon are represented by small tribes *via* Puget Sound and Oregon, in Arizona and Mexico. The very conservative opinion of Dr. Brinton is that "no reasonable doubt exists but that the Athapascans, Algonkins, Iroquois, Chakta-Muskokis and Nahuas all migrated from the north or west to the regions they occupied."⁽⁵⁾ All main migration routes in the two Americas go south and east. This influx from Northern Asia brought the demotic characteristics of the savage pre-Columbian tribes,—the bow and arrow, the spear and war-club, basket-making and the birch-bark canoe; it has been aptly called the Populating Immigration.

The *Kuro shiwo*, or black stream of the Japanese, flows eastward from the land of the Rising Sun, passes along the south shores of the Aleutians, and, reaching the coasts of America, sweeps southward past the fir-clad hills of Washington and Oregon to enter the westward flow of the northern equatorial current off the peninsula of Lower California. It is this great ocean highway that we must examine for evidence of civilized migration; here is a route over which, without compass or chart, the civilization of Asia may have reached America; it has for countless centuries cast the wrecked and drifting East-Asian upon the shores of America from the outer Aleutians down to Mexico. One well-authenticated case illustrates the probability of the migration of civilization by this route. In December, 1833, a Japanese junk was thrown ashore at Osette, on the coast of Washington, twenty miles south of Cape Flattery. Three mem-

(4) *Voyages from Asia to America*, Muller.

(5) *The Myths of the New World*, p. 47. Brinton.

bors of the crew—the captain, mate and a boy—were alive, while fourteen had died on the long drift across the ocean. The vessel had been disabled in a typhoon off the coast of Japan and had drifted helplessly across the ocean to be wrecked on the shores of America; it was loaded with cotton cloth, pottery and rice. The Makahs made captives of the living seamen, and permitted them to send a letter to the Hudson Bay Post at Fort Vancouver on the Columbia River. Commodore Wilkes learned the particulars of this wreck when in the Columbia River in 1841, and says of it: "The officers of the Hudson Bay Company became aware of this disaster in a singular manner. They received a drawing on a piece of China paper, in which were depicted three shipwrecked persons, with the junk on the rocks, and the Indians engaged in plundering." ⁽⁶⁾ In this wreck we see how certainly the *Kuro shiwo* may have been the route of migrating, though involuntary, civilization to America; here were Buddhists, with a hieroglyphical letter, on paper, among the rude tribes of America; here was cotton cloth and pottery, both of which, by the way, the Aztecs and Mayans manufactured, thrown upon the continent; here was the seed of the Mongolian civilization; it only needed the good soil to propagate it. Grant that this seed has been drifting, as it certainly has, to this continent for long centuries, and you have the story of the growth of an Asiatic plant upon American soil. The Aleutian Islands have been strewn with Asiatic junks ever since the beginning of their history. Japonski Island, near Sitka, received a living crew that had drifted to that coast; they have been cast ashore on Queen Charlottes and Vancouvers Islands, and upon the shores of Washington, Oregon and California. "In 1845 the United State frigate "St. Louis" took from Mexico to Ningpo, in China, three shipwrecked Japanese, being survivors of the crew of a junk which had drifted from the coast of Japan entirely across the Pacific Ocean and finally stranded on the coast of Mexico, where they remained two years" ⁽⁷⁾ Every Japanese vessel for thirteen centuries has carried the calendar of China,

(6) U. S. Exploring Expedition, vol. 4, p. 295. Wilkes.

(7) Japanese Wrecks, p. 12, Brooks.

her hieroglyphical writing and the Buddhist or Taoist religion; hundreds of such wrecks have been thrown on the west coast of America within historic days; here was the route and means by which America received from Asia her Civilizing Immigration.

The study of the human body, or the science of somatology, affords Major Powell no evidence of the kinship of the yellow-skinned, black-haired, beardless, tribes of Eastern Asia and the continents of America. He recognizes the entire uniformity of the American tribes in height, color, hair and other standards, and notes the absence of the African dwarf and the oblique eye of the far East. Has Major Powell forgotten that the oblique eye is a disease and not a racial characteristic? Dr. Brinton tells us that it is known to surgeons under the name of *epicanthus*, is a slight deformity of the eyebrow, and rather prevalent in a few American tribes.⁽⁸⁾ The uniformity in physical characteristics from Berings Strait to Terra del Fuego is strong evidence of a recent separation of these tribes from the parent race. If the separation from the primordial stock occurred, as Major Powell asserts, in a remote geological period, why have they not devaricated into extreme types like those in the Old World? Why do we not find tribes in America as unlike as the white and black races, or corresponding to the pygmies of Africa? Is it not because of the recent separation from the parent race?

Then, too, many eminent naturalists disagree with Major Powell on the main question. Professor Flower, president of the Anthropological Institute of America, in his address to that body in 1885, announced his opinion to be that mankind is divided into three extreme types, "represented by the Caucasian of Europe, the Mongolian of Asia, and the Ethiopian of Africa," and he includes the American Indian in the Mongolian group. Cuvier reached this conclusion and is followed by Huxley, Latham and M. de Quatrefages. One of the latest inquiries along this line is that of Dr. Paul Topinard, in his "*Elements d'Anthropologie Generale*." Basing his conclusions upon critical comparisons of height, color, hair, the nasal and cephalic indices,

(8) *Essays of an Americanist*, p. 64. Brinton.

and other accepted standards, he concludes that the American tribes belong to the Mongolian family. We have abundant authority in the opinions of great naturalists in asserting that the American Indians belong to the Mongolian stock.

Philology has discovered but two types of language spoken throughout the Mongolian regions of Asia and amongst the native tribes of America. These are known as the monosyllabic and agglutinative types, and the following classification shows their distribution :

Mongolian Languages.	{	1. Monosyllabic.	{	1. Chinese and cognate tribes.
				2. Otomis, Mayas and others.
	{	2. Agglutinative.	{	1. The Turanian stock.
				2. The American tribes generally.

We are informed by Dr. Brinton that both the Chinese and Mayan languages "tend toward monosyllabism," and in his scholarly essays he classes them together as having this common characteristic.⁽⁹⁾ Bancroft says that in the Mayan tongue "monosyllabic words are of frequent occurrence," while "the Otomi claims our attention in one particular, it is the only true monosyllabic language found in the Pacific states."⁽¹⁰⁾ Gallatin says of the Otomi: "From all that precedes, since the Otomi words are either monosyllabic, or, if having more than one syllable, each of these retains its former sense; and since all the syllables of the language have a signification and therefore are words, * * * the Otomi language must be called and held to be monosyllabic. And as it is impossible that a monosyllabic should be derived from a polysynthetic language, we must seek for its origin elsewhere than amongst the Mexicans, the Tarascas or , of the other languages of Anahuac."⁽¹¹⁾ While some philologists have sought to establish a fundamental difference between the languages of America and northeastern Asia, Humboldt and other high authorities have declared them to be of the agglutinative type and, therefore, Turanian at base. Humboldt declared: "I have

(9) *Essays of an Americanist*, p. 215. Brinton.

(10) *Native races*. Vol. 3, p. 737. Bancroft.

(11) *Trans. Am. Eth. Soc.* Vol. 1., p. 297. Gallatin.

selected the American languages as the special subject of my investigations. They have the closest relationship of any with the tongues of northeastern Asia." (12) A distinguished Canadian philologist reaches the conclusion: "Of all the Asiatic languages the Japanese-Koriak have the closest affinities to those of America. This I found for myself, but I need not have done so, for Dr. Latham long ago pointed out the fact. He says: "In the opinion of the present writer, the Peninsular (Japanese-Koriak) languages agree in the general fact of being more akin to those of America than any other." (13) Max Muller states that "the most characteristic feature of the Turanian languages is what has been called agglutination, or 'gluing together.'" (14) Major Powell, in his official "Introduction to the study of Indian Languages" calls attention to agglutination as the prominent characteristic of the American tongues, and quotes Trumbull with entire approval, who says: "What the Indian has so skillfully put together—'agglutinated' or 'incorporated'—must be carefully taken to pieces and the materials of the structure examined separately." (15) A monosyllabic language connects the Oriental civilizations of China and Central America; agglutination connects the barbarism of northeastern Asia with that in America.

There are in America, north of Mexico, sixty separate stock languages, differing in vocabulary yet agreeing generally in structure. Major Powell calls attention to them and asserts that they have not been multiplied merely by a separation of the tribe into bands, who have through isolation produced separate stocks. He cites the widespread distribution of the Eskimauan along 10,000 miles of the sea coast, and the long isolation of many of its families, yet all speaking the pure tongue, as proof of the law. He explains the multiplication of these stocks by the contact of different languages, and asserts, "that the chief factor in differentiation is the compounding of different primordial tongues."

Of the sixty stock languages north of Mexico but nineteen were found east of the Rocky mountains; forty-one are found

(12) *Essays of an Americanist*, p. 330. Brinton.

(13) *Trans. Literary and Hist. Soc. Quebec*, 1880-81. p. 67. Campbell.

(14) *Science of Language*. Vol. 1. p. 291. Muller.

(15) *Introduction to the study of Indian Languages*. p. 62. Powell.

along the salmon streams emptying into the Pacific, in the states of California, Oregon, Washington, British Columbia and Alaska.⁽¹⁶⁾ According to his law, then, we are to account for the great number of Pacific shore languages by a conceded contact between different primordial tongues. It is not the sea shore alone which produces them, for no such remarkable variety existed along the Atlantic from Greenland to Terra del Fuego, nor from Mexico to Cape Horn. Do not the hundreds of known wrecks along this Pacific beach, whereby the different agglutinative and sometimes monosyllabic dialects of Asia have been cast into bands of Orarians, "dwellers on the shore," fill the measure of the law, and afford ample evidence of the origin of this linguistic variety? Then, too, all the tribes north of Mexico trace their lines of migration from the northwest; this, and Maj. Powell's law, leads irresistably to the conclusion that all languages north of Central America originated, or were compounded, on the North Pacific beach. Either the Powell law is at fault, which I do not admit, or the North Pacific ocean current, weighted for twenty centuries with the flotsam and wreckage of Eastern Asia explains the presence of that remarkable linguistic variety along the salmon streams of the Pacific slope. The linguistic stocks north of Mexico originated in the contact, along the North Pacific beach, between the civilizing tongues of Asia and the populating tongues coming through the Bering Sea region.

It is impossible in a brief article to compare everything which may be akin in Asia and America; it is necessary to limit the field. This may be done by comparing either the wild tribes or the semi-civilized nations, and as the latter will afford the best test, further comparisons herein will be made between the Chinese type and the equally civilized Aztec-Mayan nations.

The Chinese type spoke monosyllabic dialects; monosyllabic dialects were spoken in Mexico and a compound in Central America. Let us compare the written characters of these monosyllabic tribes. Neither the Chinese nor Aztec-Mayan written characters are founded upon an alphabet or syllabary. In the

(16) Linguistic Stocks of American Indians. Maj. Powell.

beginning they were pictographic or ideographic. In China and Central America a wing or the streaming hair denoted flight, being the ideogram for the flying bird or the running man. In both lands their ideographic signs were reduced, in writing, to a few simple and conventionalized outlines of the original picture. In both systems two or more characters are added together, and the compound often conveys a meaning which neither of the simple characters had theretofore suggested. For instance: In both a circle represented the sun; joined by a wing or hair affix, it becomes the ideogram for the flight of the sun across the heavens. In both systems there were simple and abbreviated characters, but many more composites.

The sun symbol in both China and Central America was a circle with a dot, representing the numeral one, in the center. The Chinese name for the sun is "zhih," or in the Shanghai dialect "nih"; the Mayan name is "kih" or "kin"; the Chinese name means "the sun, a day, day time, in the time of, the day for a thing, as anniversary; in casting lots, means the emperor, his palace, day or reign."⁽¹⁷⁾ The Mayan term "kih" or "kin" means "the sun, a day, a time or epoch, an occasion or opportunity, the sign or constellation under which one is born, hence fate or fortune."⁽¹⁸⁾ Here we find the same monosyllabic word, the same ideogram, having the same meaning in both China and Central America.

The moon symbol in both lands was derived from the crescent. The Chinese name for moon is "yueh," and it means both moon and month.⁽¹⁹⁾ The Mayan word is "U," having the same sound value as the Chinese word, though spelled differently by Europeans; the Mayan word means, also, both moon and month.⁽²⁰⁾ Again we have the same monosyllabic sound, represented by the same ideogram, while the word has the same dual meaning.

Chinese and Mayan cardinal point ideograms have these

(17) *A Syllable Dictionary of the Chinese Language*, p. 203. Williams.

(18) *The Annals of the Cakchiquels*, p. 223. Brinton.

(19) *A Syllable Dictionary of the Chinese Language*, p. 1129. Williams.

(20) *Incidents of Travel in Yucatan*, vol. 1, p. 436. Perez.

common characteristics; they are composites; the modifier is placed above the sun symbol in the east and west characters; each of the ideograms for the east and west has the wing as an affix, denoting the sun's movement across the heavens; the sun symbol appears only in the east and west ideograms; the north character in each land has the back for its main idea, it represents the emperor facing the south; the character for south refers to the origin of plant life. The Mayan ideographic signs for the cardinal points contain only Chinese elements, neither more nor less; they are as fairly Chinese ideograms as can be found in any Middle Kingdom dictionary.

Brinton says of the Mayan writing that "it was a hieroglyphic system, known only to the priests and a few nobles; it was employed for a variety of purposes, prominent among which was the preservation of their history and calendar; it was a composite system, containing pictures (*figuras*), ideograms (*caracteres*), and phonetic signs (*letras*)."⁽²¹⁾ Identically with it the Chinese system of writing contains pictures, ideograms and phonetic signs, and nothing more. Other nations reached an alphabetic system; "not so with the Chinese language; this still maintains its ideographic character, and is now used as the written medium for the intercourse of more human beings than any other."⁽²²⁾

The next upward step in the evolution of ideographic writing was taken when the picture of the object became so intimately associated with the sound as to assume a phonetic value. A large number of characters in the Chinese and Aztec-Mayan were thus given a phonetic value. Brinton recognizes this element in the Mayan system, and concludes: "Hence affixes, suffixes and monosyllabic words are those to which we must look as offering the earliest evidences of a connection of figures with sound."⁽²³⁾ Brinton, Bancroft, Schellhas and Thomas assert that a large number of the Mayan ideograms were given a phonetic value. Precisely this same division of hieroglyphics into ideo-

(21) *Essays of an Americanist*, p. 246, Brinton; *Vestiges of the Mayas*, p. 66, Le Plongeon.

(22) *A Syllabic Dictionary of the Chinese Language*, p. XI, Williams.

(23) *Essays of an Americanist*, p. 198-200. Brinton.

graphic and phonetic characters is the peculiar feature of the Chinese system. Their written characters are classified as radicals, which suggest an idea, and primitives or phonetics, which denote sound. This division is the same in both lands and lies at the very base of both systems.

The Chinese tribes and the Aztec-Mayan people were paper makers; they both made paper from vegetable fibre, by the same process of manufacture; both arranged their writings into books folded fan-like with board backs. Both wrote from right to left and from top to bottom. Veytia, who was personally acquainted with the Mayan system, says: "It is to be noted that most of the calendars, - those of the cycles as well as those of years and months which they used to form in circles and squares, ran from right to left, in the way the Orientals write, and not as we are accustomed to form such figures."⁽²⁴⁾ Major Powell reaches the following official conclusion from a careful examination of the American codices: "First: That the order in which the groups and characters are to be read is around to the left, opposite the course of the sun, a point of vital importance formerly much disputed."⁽²⁵⁾ In each of these matters the two systems of writing exactly agree; the Chinese write from right to left, from top to bottom and in a circuit opposite the course of the sun, and both wrote the same kind of ideographic characters, on the same kind of paper in the same form of volume, and with the same kind of brush. The Chinese were the first people in the Old World to use moveable type; the Aztecs, according to Dr. Brinton, also used moveable type in their books.⁽²⁶⁾

Both the Chinese and Aztec-Mayan people used the digital system of numeration; it is based upon the count of the fingers and toes. In their graphic representation of numbers, too, there is a remarkable similarity. Among the Chinese, "in ancient times calculations were carried on by means of *Shen*, or tallies made of bamboo, and the written character is evidently a rude representation of these. From 1 to 5, the numbers are repre-

(24) Hist. Ant. Mex. Vol. 1, p. 48. Veytia; *Essays of an Americanist*, pp. 159, 161. Brinton.

(25) 3rd Ann. Rep. Bureau of Ethnology, p. XXX. Powell.

(26) *The Myths of the New World*. p. 24. Brinton.

sented by the respective number of parallel strokes; from 6 to 9, inclusive, one stroke is drawn to represent 5, and the additional number is represented by so many strokes perpendicular to it." (27) Herewith follows a table arranged according to this method, by the side of the Mayan numerals, up to nineteen, above which we do not know the Mayan:

No.	CHINESE NUMERATION.		MAYAN NUMERATION.	
	Numbers.	Numerals.	Numbers.	Numerals
1	I		Hun	.
2	Erh		Ca	..
3	San		Ox	...
4	Sz		Can	
5	Wu	—	Ho	—
6	Liu	—	Uac	— .
7	Chi	—	Uuc	— . .
8	Pa	— —	Uaxac	— . . .
9	Chiu	— —	Bolon	—
10	Sh	+ —	Lahun	— — —
11	Sh-i	+ —	Buluc	— . —
12	Sh-erh	+ —	Lahca	— . . —
13	Sh-san	+ —	Oxlahun	— . . . —
14	Sh-sz	+ —	Canlahun	— —
15	Sh-wu	— + —	Holahun	— — — —
16	Sh-liu	— + —	Uaclahun	— . — — —
17	Sh-chi	— + —	Uuclahun	— . . — — —
18	Sh-pa	— — + —	Uaxaclahun	— . . . — — —
19	Sh-chiu	+ —	Bolonlahun	— — — —

In the Mayan the straight lines may be indiscriminately drawn vertically or horizontally; if the number eleven was written in Mayan by placing the two lines vertically, the dot for one would be placed to the left, as it is in Chinese. The figures 1 to 4 are dots in Mayan, short lines in Chinese; the figure 5 is a short horizontal line in both; ten is composed of two lines,

(27) The Chinese and Japanese Repository. May, 1864, p. 448.

crossed in Chinese, parallel in Mayan; fifteen is composed of three lines in each system. The symbols in both are arbitrary and evidently represent the ancient *shen*, or tallies.

All the numerals in the Mayan writings are painted either red or black,⁽²⁸⁾ and so they were in the Chinese. "In Tsin's original work, positive and negative numbers are distinguished by the former being in red ink, and the latter in black; and this custom seems to have been in use long before his time; for we find Liu Hwui referring to it in the sixth century. It is said to represent the bamboo tally numerals, used in ancient times."⁽²⁹⁾

The rainbow spanning the Mayan sky was called "ix Kan leom," or the spider's web. The Chinese call it *ti*; the ideogram representing it is a composite of two simple characters, the first meaning insect and the other meaning girdle, to connect and spider; it has the same meaning as the Mayan term—it means the spider's web.

An eclipse of the sun or moon produced the same terror and commotion in China and Japan that it did in Mexico and Central America, and for the same reason. The Chinese believe that the eclipse is caused by a dragon eating the sun or moon. In Yucatan the people thought the luminary was being devoured by the ant Xulab or other dragon, and in both regions loud noises were resorted to for the purpose of scaring away the ravenous monster—and, Doolittle adds, "invariably with success."

The Chinese thunder god is half bird, half human; he wears a bird beak, his legs end in bird's claws, and behind human arms he supports bird's wings. In one hand he wields a mallet, in the other he holds a chisel; these represent the dual powers, and by the stroke of the mallet upon the chisel thunder and lightning are produced.⁽³⁰⁾ The Mayan tomahawk, called *bat*, was the symbol for thunder and lightning; and, Brinton adds, "Another figure which seems to indicate the same is the broad-pointed object seen in the hands of deities;"⁽³¹⁾ the mallet and chisel of the Chinese is represented by the tomahawk and

(28) A Study of the Manuscript Troano, p. 17. Thomas.

(29) The Chinese and Japanese Repository, June, 1864, p. 497.

(30) Social Life of the Chinese, vol. 2, p. 300. Doolittle.

(31) A Primer of Mayan Hieroglyphics, p. 104. Brinton.

chisel of the Mayan; both represent the dual powers which, striking, produce thunder and lightning. Brinton describes one of the Mayan deities as "the personification of the thunder storm. In expression she is severe, her lips protrude in anger, and her hands and feet sometimes end in claws;"⁽³²⁾ in short, the thunder deity with beak and claws, exactly like that of the Chinese.

The Chinese and Aztec-Mayans believed that rain could be produced by supplications addressed to the rain god; their written ideographic characters for rain and water are identical.

A belief in witchcraft, divination and astrology was common to China, Japan, Mexico and Central America. From the number and name of the day and hour of birth the priest in China and Central America pretended alike to forecast the destiny of the child and to fix the power and spiritual influences which should govern its life. The priests in each land arranged an annual almanac, fixed the good and ill fortune of each day, and this almanac was used as the people's guide in all matters for that year. No important event in either land was undertaken until the almanac was consulted and the day found to be propitious. These almanacs contained astrological and prophetic rules and regulations, medical recipes and directions, and were on the same exact plane as to form, material and contents.

Their profoundest philosophy agreed in every respect. Each believed that a masculo-feminine organization of the universe was evolved out of chaos. The Yang and Yin symbol, denoting the masculo-feminine theory, is found in both lands. The number three was sacred; Heaven, Earth and Man constitute the Chinese *san tsai*, or three powers, and is represented among their symbols by a circle divided into three parts, the upper representing heaven, the center man, and the lower part the earth. Brinton says of the Mexican three powers: "The triplicate constitution of things is a prominent figure of the ancient Mexican philosophy, especially that of Tezcuco. The visible world was divided into three parts, the earth below, the heavens above and

(32) A Primer of Mayan Hieroglyphics, p. 68. Brinton.

man's abode between them. The whole was represented by a circle divided into three parts, the upper painted blue, the lower brown, the center white."⁽³³⁾

Each system gave special prominence to the number four ; the square form of their world gave four cardinal points, four seas and four divisions of the land ; there were four colors, four deities, four elements, four viscera, and other functions and powers, each assigned to a cardinal point ; there were in each system four great movements of the sun, the solstices and equinoxes, by which the four seasons were fixed, and each of these was also assigned to a cardinal point ; the map of the sky was divided into four parts and each part assigned to a cardinal point.

The Emperor in each land was the "Son of Heaven," and ruled by divine right ; he was the head of both church and state. Both lands supported monasteries filled with monks, who burned incense, chanted and offered sacrifices to the same character of gods ; both supported nunneries. Human sacrifice was offered in China as in Mexico, but not with such horrid prodigality. Sacrifices upon the great altars of Pekin are fruits, flowers, birds and animals, as was the custom among the Mayas.

God, the Supreme Essence, was called Teotl by the Aztecs and Tao by the Chinese ; all the deities below the Supreme Essence were but deified heroes. In opposition to the Aztec Teotl is the evil one—the Owl ; the Taoists of China look upon the owl as one of the servants of the evil one,—it is the bird which calls for the soul of the dead and conveys it to the Underground World ; all the dead in China and America went to this underground world, and both locate it in the north. Neither of them believed in any other heaven, and neither believed in a hell.

(33) *Essays of an Americanist*, p. 151. Brinton.

The following is a comparative list of a portion of the deities of the Chinese and Aztec-Mayans :

CHINESE.	AZTEC-MAYAN.
Tao, the Supreme Essence; God.	Teotl, the Supreme Essence; God.
Chaos, before the beginning.	Chaos, before the beginning.
Ta-Kieh, bisexual life.	Gukumatz, bisexual life.
Pan-Ku, male ancestor—Adam.	Xpiyacoc, male ancestor—Adam.
Nu-Kua, female ancestress—Eve.	Xmucane, female ancestress—Eve.
Ti-yu, Underground World (North).	Mictlan, Underground World (North)
Owl, the evil one.	Owl, the evil one.
Tai-Sang, lord of underworld.	Mictlan-tecueti, lord of underworld.
Ling Chu Na. "Mother."	Tonantzin, "Our Mother."
Ma-Chu. "Grandmother."	Tocitzin, "Our Grandmother."
Tsao chun, household god.	Tepitotons, household god.
Huo Shen, god of fire.	Xiuh-tecutli, god of fire.
Kuan Yu, god of war.	Huitzilopochtli, god of war.
Tu Chien Kui, god of Gamblers.	Macuilxochitl, god of Gamblers.
Ngu Hieng Kung, god of Thieves.	Tlozolteotl, god of Thieves.
Ioh Uong Chu Su, god of Medicine.	Oxomococipactonatl, god of Medicine.
Jih Chu, the sun god.	Tonathiu, the sun god.
Hou I, the moon god.	Mextli, the moon god.
Hou Chi, god of Agriculture.	Centeotl, the god of Agriculture.
Shen Nung, "divine husbandman."	Ghanan, god of Fertility.
Ts'ai Shen, god of Merchants.	Yaca-tecutli, god of Merchants.
The, "Short Black Devil."	Ixtlilton, "the little Negro."
Lu Pang, god of Artisans.	Napatecutli, god of matmakers.
Yu Shih, god of Water.	Tlaloc, god of Water.
Kuang Ing Kuk, goddess of children.	Yoalticiti, goddess of children.
Nu Kan, serpent woman.	Cihuacoatl, serpent woman.
Teu Kwei, god of North Star.	Xaman Ek, god of North Star.
Feng Pe, god of Air.	Quetzalcoatl, god of Air.
I-bi, god of Wine.	Acan, god of Wine.
Wen-ti, god of Literature.	Ix Chebel Yax, god of Literature.
Yama, god of Death.	Ah Puch, god of Death.

There is an interesting resemblance between the Chino-Japanese and the Mayan gods of wealth.

CHINO-JAPANESE. ⁽³⁴⁾	MAYAN BACABS. ⁽³⁵⁾
Hotei, (Big Belly).	Hobnil (the Belly).
Benzai, (Serpent Being).	Canzicnal (Serpent Being).
Fukurokujin (White Being).	Zaccini (White Being).
Daikoku (Great Black).	I'ozan Ek (Black One).
Ebisu, patron of Daily Food.	Yum Kaax, lord of Harvests.

⁽³⁴⁾ Japan as it was and is. p. 272. Hildreth.

⁽³⁵⁾ A Primer of Mayan Hieroglyphics. p. 41. Brinton.

The Japanese gods of wealth reached that land from China with Buddhism in 507-'31 A. D., only the last one being a native; they reached America at a still later date.

The Chinese and Aztec-Mayan people based their system of government upon the cardinal points; they each existed under a Quadriform Constitution. The Chinese world was flat and square; Loh, the capital, was in the exact center of heaven and earth.⁽³⁶⁾ Formerly the Emperor made four tours of inspection—to the east in the second month, to the south in the fifth month, to the west in the eighth month, and to the north in the eleventh month; during the four following years the nobles appeared at court, those from the east coming the first year, those from the south the second, from the west in the third, and from the north in the fourth.⁽³⁷⁾ By this system of cardinal point inspection and reports the Middle Kingdom was governed. China was divided into four quarters upon the line of the cardinal points; the Chief of the Four Mountains was the head of the four groups of officials, each of which ruled a quarter. The Zunis, Mexicans, Mayans and Peruvians formed their government upon the same constitutional lines; their respective capitals were in the center of what each declared to be a square and flat world. Cushing has shown us how the clans of Zuni were assigned to the cardinal points, and how each clan was given its color, element, season, activity, society and viscera.⁽³⁸⁾ Zelia Nuttall has clearly pointed out the application of this same arrangement in the markets and domestic affairs among the Mexicans,⁽³⁹⁾ and it prevailed as a constitutional basis in Central America and Peru and is well shown in the divisions of the different empires upon the cardinal point line.

Peking is a square, walled city and may be taken as the model in this quadriform scheme; the "Carnation Prohibited city" occupies the center and here are the sacred buildings and palaces of the "Son of Heaven." In the center of the main city lies the *King Shan*, a square, walled enclosure with a great

(36) The Chinese Classics; Shu King, vol. 3, pt. 1, p. 90-94. Chalmers.

(37) The Chinese Classics; The Canon of Shun, p. 37. Legge.

(38) Ann. Rep. Bureau of Ethnology, 367-72. Cushing.

(39) Note on the Ancient Mex. Cal. system, p. 21. Nuttall.

teocalli occupying its center.⁽⁴⁰⁾ At each central cardinal point on its walls a battlemented gateway opens outward, and the principal boulevards run thence north, south, east and west to the outer walls, where they connect with the great roads of the empire. By this system, springing from the central *teocalli* the nation is divided into four quarters on the line of the cardinal points. In the center of the City of Tenochtitlan stood the same great *teocalli* and sacred edifices, surrounded by the same square wall, pierced at the same central points by the same battlemented gateways, opening upon the same four great roads to the cardinal points, and dividing the nation in the same way into quarters.⁽⁴¹⁾ This identical plan was followed in Cuzco,⁽⁴²⁾ and in nearly all the cities of Mexico and Central America. It is distinctly a northern Mongolian arrangement, and is found in Mukden⁽⁴³⁾ and other Mongolian capitals as well as in Peking.

The Chinese and the American nations accurately measured the length of the solar year, and fixed the dates of the solstices and equinoxes by the same simple device of the gnomon, a pillar which measured the length of the shadow at noon tide. The Chinese believed that the gnomon cast a straight shadow only at Loh, their capital; "here it was not found to deviate in either direction and its length on midsummer day was to the length of the gnomon as 15 to 80."⁽⁴³⁾ Of Peruvian astronomy Squeir tells us that "the period of the equinoxes they determined by the help of a solitary pillar, or gnomon, placed in the center of a circle which was described in the area of the great temple, and traversed by a diameter that was drawn from east to west."⁽⁴⁴⁾ According to the authority of Zelia Nuttall and Gallatin, the Aztecs and Mayans also determined the dates of the solstices and equinoxes by the use of the same simple instrument.⁽⁴⁵⁾

In Peru, Central America and Mexico the solar year began

(40) The Middle Kingdom, Vol. 1, pp. 66-71. Williams.

(41) Conquest of Mexico, Bk. 4, Chap. 2. Prescott; Native Races, Vol. 2, p. 561-578. Bancroft.

(42) Conquest of Peru, Book 3, Chap. 8. Prescott.

(43) The Middle Kingdom, Vol. 1, p. 192-98. Williams.

(44) The Chinese Classics; Shu-King; vol. 3, pt. 1, pp. 90-91. Chalmers.

(45) Peru, page 525. Squeir.

(46) Trans. Am. Eth. Soc., vol. 1, p. 79. Gallatin. Note on the Ancient Mex. Cal. System, pp. 13-17. Nuttall.

upon the date of the winter solstice.⁽⁴⁶⁾ And so it did in China. Davis says of the beginning of the Chinese year: "In an astronomical sense they may be said to have a solar year as well as a lunar, and the winter solstice makes its annual limit."⁽⁴⁷⁾ Throughout Mongol-land, in China and in America, at midnight at the winter solstice was the beginning of a new period.

In China, Japan, Mexico, Central America and Peru the four greatest national festivals coincided in time with the solstices and equinoxes. Four times each year the Emperor of each of these nations, dressed in his royal robes, surrounded by his nobles, accompanied by priests bearing incense and sacrifices and preceded by musicians beating the temple drums, with the same display and ceremony, mounted the steps of a terraced altar and knelt upon its summit in humility and imperial obeisance to the nation's god. Upon the same day of the year, on the same form of an altar, with similar ceremonies and sacrifices, preceded in each case by imperial fasting, each emperor celebrated the advent of the same movement of the sun.⁽⁴⁸⁾ Each of these four movements, and each season marked by its date, was assigned to a cardinal point, and by this combination of three of the most striking manifestations of nature—the solstices and equinoxes, the cardinal points and the seasons—did these children of their common Mother Earth persuade themselves that their philosophy was founded upon the rock of truth and science and regulated by the power of high Heaven.

Other than the four great festivals at the solstices and equinoxes the Chinese and American nations held sacred festivals of the same kind and character and about the same number each year; they were regulated in time in each land, first by the solstices and equinoxes and second by the lunar periods.

The great altar at Peking, dedicated to the worship of the sun and fire, stands at the east gate, that devoted to the moon and water at the west gate, that to earth at the north, and to the

(46) *Trans. Am. Eth. Soc.*, vol. 1, p. 79. Gallatin. *Conquest of Peru*, book 1, pp. 57-58. Prescott.

(47) *China and the Chinese*, vol. 1, p. 284. Davis.

(48) *The Religions of China*, pp. 82, 86, Legge; *Problems of the Far East*, p. 202, Curzon; *Social Life of the Chinese*, vol. 2, p. 72, Doolittle; *Note on Ancient Am. Cal. System*, pp. 10-17, 19, Nuttall.

sky and air at the south; in the Pah Kwa of Fuh-hi, the elements are assigned, fire to the east, water to the west, earth to the north and air to the south.⁽⁴⁹⁾ The Aztecs and Mayans assigned these same elements to the cardinal points, fire to the east, air to the south, water to the north, and earth to the west.⁽⁵⁰⁾ They made identically the same assignments of colors, elements, viscera, deities, birds, planets and other functions and elements of nature to the cardinal points, all in accordance with their common Quadriform Constitution.⁽⁵¹⁾

The old calendar system of China, combining its astrology and chronology, found its way into the New World. We have noticed that in both these regions the solar year began at the winter solstice. Besides the solar year each had a lunar year. The date of the beginning of the lunar year in America has not been agreed upon. The Aztec New Year's day has been fixed at various dates between January 1 and March 30, no two authors being able to agree, or to give a good reason for their assignments. Zelia Nuttall seems to have been the first to suggest the rule by which to determine this point; she fixed it at the new moon nearest to the spring equinox, and her conclusion is substantially correct.⁽⁵²⁾ "In Thibet the New Year's festival properly begins at the new moon, and may be delayed till some time in February. The festival begins at midnight and lasts fifteen days."⁽⁵³⁾ "The Japanese year begins at the new moon nearest to the fifth of February (the middle point between the winter solstice and the spring equinox)."⁽⁵⁴⁾ "In China New Year's day falls at the first new moon after the sun enters Aquarius, which makes it come not before January 21, nor after February 19."⁽⁵⁵⁾ Without multiplying authorities it may be accepted as certain, first, that in China and America the date of the New Year's festival was not the same each year, and, second, that it was fixed in relation to the new moon and the spring equinox.

(49) *The Middle Kingdom*, vol. 1, p. 628. Williams.

(50) *The Aztecs*, p. 107, Biart; a *Primer of Mayan Hieroglyphics*, p. 41. Brinton.

(51) *Third Ann. Rep. Bureau of Ethnology*, pp. 49-50. Thomas.

(52) *Note on the Ancient Mex. Cal. System*, p. 9. Nuttall.

(53) *Buddhism*, p. 342. Williams.

(54) *Japan as It Was and Is*, p. 271. Hildreth.

(55) *The Middle Kingdom*, vol. 2, p. 70, Williams.

In China "the year is divided into seventy-two periods of five days each, an arrangement traced to the period of the Chow dynasty."⁽⁵⁶⁾ It is exactly true of the Aztec-Mayan year, also, that it was divided into seventy-two periods of five days each. In both systems there were five days in the week, and four seasons of eighteen weeks, or $5 \times 4 \times 18 = 360$ days in the year. This did not give the exact solar year and both nations intercalated the necessary days. In China, Chalmers tells us, that this "intercalation was regulated by the natural recurrence of the seasons and rude observations from year to year. During the Chow dynasty, intercalary months were placed at irregular intervals, but most frequently at the end of the year."⁽⁵⁷⁾ The Aztec-Mayan people also added the extra days at the end of the year, and by this common system of chronology both nations fixed the length of the true solar year of 365 days, round numbers.

In both systems years were arranged into cycles, by indications; the Chinese, since the Christian era, into five groups of twelve years each, and the Aztec-Mayans into four groups of thirteen years each. Each year of each cycle bore two names, in China the name of an animal and an element, in America the name of an animal and a number. These cycles agree in these particulars: their division into indictions; the dual naming of each year; the fact that no two years of a cycle could possibly have the same name. Both performed the singular ceremony of "binding up the years" at the end of fixed periods.

The Aztec-Mayans employed a ritual year of twenty periods of thirteen days each, or 260 days; Prof. Thomas has pointed out a similar ritual year in the Javan system.⁽⁵⁸⁾

Humboldt noted that the Mongolians and Americans gave animal names to days and says of this proof: "The six signs of the Tartarian zodiac, which are also found in the Mexican calendar, are sufficient to make it extremely probable that the nations of the two continents have drawn their astronomical ideas from a common source, and it is worthy of notice that the points of

(56) The Chinese Readers Manual, p. 339. Mayers.

(57) The Chinese Classics; Shu-King, Vol. 3, pt. 1, p. 99. Chalmers.

(58) The Maya Year; p. 62. Thomas.

resemblance upon which we insist are not derived from rude pictures or allegories, susceptible of being interpreted in accordance with any hypothesis that it is desired to sustain. If we consult the works composed at the time of the conquest, by Spanish authors, or by American Indians who were ignorant of the existence of a Tartarian zodiac, it will be seen that in Mexico, from the seventh century until our era, the days have been called "tiger," "dog," "monkey," "hare," or "rabbit," as throughout Eastern Asia, the years bear the same names among the Thibetans, the Tartar-Mantchoos, the Mongols, the Calmucks, the Chinese, the Japanese, the Coreans, and among the nations of Tonquin and Cochín-China." (59)

Instead of six, upon wider comparison Humboldt would have found fourteen analogies between the Tartarian or Mongolian day names, and those of the Aztec-Mayan list, as follows:

INDO-CHINESE.

AZTEC-MAYAN.

Dragon.	Dragon.
Serpent.	Serpent.
Deer.	Deer.
Hare.	Hare.
Dog.	Dog.
Monkey.	Monkey.
Tiger.	Tiger.
Eagle.	Pheasant.
Vulture.	Raven.
House (India).	House.
Cane "	Cane
Razor "	Flint Knife.
Three Foot Prints (India)	Three Foot Prints.
Scorpion (India).	Lizard

The Chinese periods of fifteen days have meteorological or agricultural names; (60) the twenty-day periods in the Mayan system have the same names. (61) Thus we see that the days, months and years are named identically in the two systems, and that the systems are exactly alike in principle. Both systems contain different periods of varying lengths, the shorter

(59) *Vues des Cordilleres*, 157. Humboldt.

(60) *A Syllabic Dictionary of the Chinese Language*, p. 974. Williams.

(61) *The Native Calendar*, pp. 40-48. Brinton.

revolving within the longer, but all timed so as to come out exactly even at the end of the cycle.

The Chinese and Aztec-Mayans grew cotton and manufactured cotton cloth; they worked in gold, silver, copper and bronze; both worked jade and held it to be their most precious mineral. Prof. Putnam is of opinion that certain implements of finished jade found in Mexico are the true imported Asiatic jade; the Chinese jade maidens Yu-nu were worshipped in Mexico as Chalchihuitlicue and in Central America as Ix Tub Tun.

It would be easy to extend these comparisons to an almost indefinite length in detail, for every feature of the Chinese type of civilization finds its counterpart in Mexico and Central America, modified only by environment.

Major Powell asserts, however, that "in the demotic characteristics of the American Indians, all that is common to tribes of the Orient is universal." Where, nearer than the Chinese type, will Major Powell find another monosyllabic tongue like the Otomi or Mayan? Where another hieroglyphic system of writing which is written from right to left, and from top to bottom, on paper of native manufacture? Where another almanac like that of America and China? Are these things universal? Is the division of the Chinese and Mayan hieroglyphical characters into radicals and phonetics universal? Where will Major Powell find a similar system of numerals? Is the Quadriform Constitution of China and America universal? Can Major Powell point us to another calendar system having the characteristics in common between the Chinese and Aztec-Mayan? Clearly he is mistaken in saying that all these common features between the arts, industries, institutions, languages and opinions of America and China are universal; these two agree in these important and fundamental characteristics, and differ from all other tribes in respect to them.

The civilization of China reached Japan about fifteen centuries ago, and probably came to America, over the "black stream" after that date. If we may place any reliance upon

native American records, it reached Mexico and Central America six or more centuries later.

The Chino-Japanese and American systems agree in these particulars: the most civilized tribes spoke a monosyllabic language, others spoke an agglutinative tongue; their writing was ideographic and written from right to left, from top to bottom; their systems of numeration were based upon the digital count, and their old numerals up to nineteen were practically identical; their calendar systems were alike in principle and nearly so in details; both divided time into cycles and quarters thereof; the solar year in both regions began at the winter solstice and the solstices and equinoxes were celebrated in both lands on the same day by the same national festivals; both prepared almanacs upon paper of native manufacture; the good or evil power of every day was fixed by the priest-astronomer, and each almanac also contained medical recipes and astrological formula and a table of religious festivals; the same elements, colors, viscera, birds, seasons and planets were assigned in the same general scheme to the cardinal points.

Their constitutions were identical; the emperor was the "Son of Heaven" and his succession was provided for and his household ruled by the same identical laws; their systems of government were based upon the square plan of the cardinal points; the emperor was the head of both church and state; their religions supported monasteries filled with monks and nunneries filled with nuns. The people of both lands were copper-colored, were beardless, with straight, black hair. Truly, between these peoples many similarities "are discovered in institutions, languages and mystic opinions,"—they spoke "allied languages," and "had other arts in common,"—their institutions were "alike in many respects and their mythologies substantially the same."

These fundamental similarities are, in the quoted official opinion of Major Powell, if well founded, sufficient to demonstrate that the civilizations compared are related and the result of a contact of the races. By proofs similar to, and equally as legitimate as that offered to establish the existence of an Indo-Germanic language, the relationship of the Mongol-Mayan civilization

is demonstrated. It proves, too, that the American is an offshoot of the Asiatic stock, and of comparatively recent growth.

Thus we are forced to conclude that the arts, industries, institutions, languages and opinions of the American Indian are distinctly Mongolian in character; that the arrival of the civilization of Mexico and Central America upon this continent is of comparatively recent date; that the occupancy of America by the Mongolian stock occurred subsequent to present geological conditions.

The demotic characteristics of the Mongolian stock were dispersed throughout the Old and New Worlds by migration.

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